Fleute-1

REMARKS

1. Claims 1-20 were pending and stand rejected. This paper amends claims 1 and 4-20; and cancels claims 2 and 3.

Reconsideration of this application is respectfully requested.

- 2. The drawings stand objected to because the boxes shown in FIGS. 1 and 5 are not provided with descriptive text labels. In response, submitted herewith for the Examiner's approval is a proposed drawing correction which corrects FIGS. 1 and 5 by providing descriptive text labels for the boxes shown therein. No new matter is believed entered by these amendments.
- 3. Claims 1-20 stand rejected under 35 U.S.C. I12, second paragraph, as being indefinite because the phrase "selecting a deformation of the model to modify its contours in three dimensions" in claim 1 is allegedly unclear.

In response, claim 1 has been amended to recite "selecting a deformation of the model to modify its contours in three dimensions, by submitting the statistical model to a non-rigid deformation modifying its surface contours". Accordingly, withdrawal of this rejection is respectfully requested.

4. Claims 1-20 stand rejected under 35 U.S.C. 103(a) as being unpatentable over the Lavallee et al. document (Lavallee) in view of the Fleute et al. document (Fleute). This rejection is respectfully traversed.

Regarding original claim 1, the examiner correctly states that Lavallee does not disclose the step of "selecting a deformation of the model to modify its contours in three dimensions." However, contrary to the examiner's assertion, Lavallee also fails to disclose the step of "selecting a predefined model forming an average shape (21) of the object." Instead, Lavallee merely discloses an iterative adjustment of the position and orientation of the object on the basis of a known model (see figure 1 of Lavallee and the steps disclosed on page 385, left-hand column, lines 5-35).

Regarding original claim 3, Lavallee does not refer to a statistical model, as asserted by the examiner. Lavellee merely provides in step 7, page 385, an error distribution analysis that does not correspond to a statistical model. Further, the paragraph of page 387, right-hand

column, to which the examiner refers, merely concerns the selection of a three-dimensional object in a group of objects on the basis of error scores given to each object of the group, <u>not</u> a statistical model, as claimed.

Fleute fails to cure the deficiencies of Lavallee. Although Fleute discloses a statistical model, Fleute does <u>not</u> teach or suggest deforming this statistical model to rebuild a three-dimensional image from two-dimensional images.

Accordingly, independent claim 1 has been amended to include the subject-matter of originally filed dependent claims 2 and 3. Lavallee in view of Fleute clearly fail to teach or suggest all the elements of claim 1, as currently amended. At most, Lavallee in view of Fleute merely suggest the use of an analysis of error distribution, as taught by Lavallee, for repositioning the average shape of a model, as taught by Fleute, from the contours obtained according to Lavallee. This would lead to a rigid transformation and would not allow the selection of a deformation of the model in order to modify its three-dimensional contours from the intervals between back projection rays of the image contours in two dimensions from the source and the model surface, as now required in claim 1. Accordingly, claim 1 is patentable over Lavallee in view of Fleute.

Dependent claims 4-20, which recite additional features of the invention, are patentable over Lavallee in view of Fleute for at least the same reasons as stated for independent claim 1, as currently amended.

In view of the foregoing, withdrawal of this rejection is respectfully urged.

- 5. Favorable reconsideration of this application is respectfully requested as it is believed that all outstanding issues have been addressed herein and, further, that claims 1 and 4-20 are in condition for allowance. Should there be any questions or matters whose resolution may be advanced by a telephone call, the examiner is cordially invited to contact the undersigned attorney at his number listed below.
- 6. The Commissioner is hereby authorized to charge payment of any additional filing fees required under 37 CFR 1.16 and any patent application processing fees under 37 CFR 1.17, which are associated with this communication, or credit any overpayment to Deposit Account

Fleute-1

No. 50-2061.

Respectfully submitted,

Paul A. Schwarz

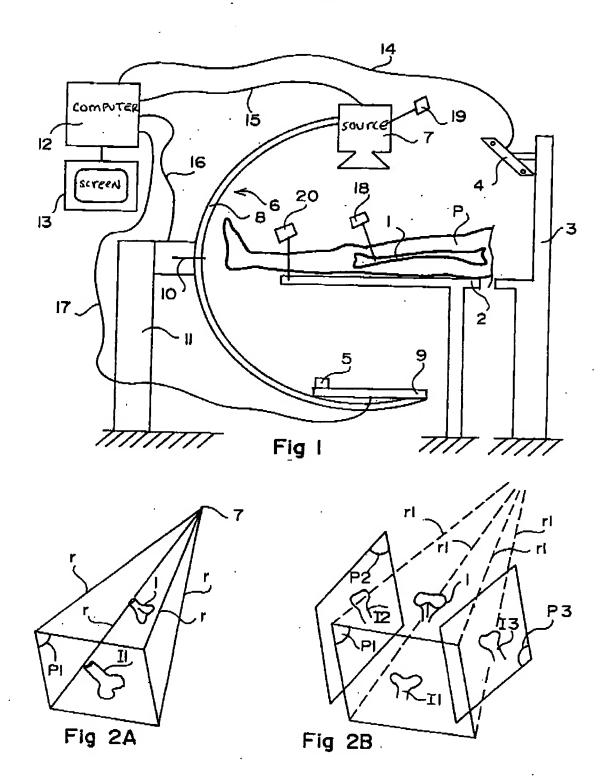
Registration No: 37,577

Duane Morris LLP P.O. Box 5203 Princeton, NJ 08543-5203 609-631-2446- Tel 609-631-2401 - Fax

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Proposed Drawing Garaction

1/3



Proposed Drawing Correction 3/3....

